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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,293	01/11/2002	Lars E.W. Nilsson	AWA-064XX	6843
207	7590	04/08/2004	EXAMINER	
WEINGARTEN, SCHURGIN, GAGNEBIN & LEOVICI LLP TEN POST OFFICE SQUARE BOSTON, MA 02109			KYLE, MICHAEL J	
			ART UNIT	PAPER NUMBER
			3676	
DATE MAILED: 04/08/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,293

Applicant(s)

NILSSON, LARS E.W.

Examiner

Michael J Kyle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20-44 is/are pending in the application.
- 4a) Of the above claim(s) 21-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18, 20 and 44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 9-13, 15, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahlrot (U.S. Patent No. 3,955,834) in view of Suggs et al ("Suggs", U.S. Patent No. 5,499,827).
3. Ahlrot discloses a tubular ventilation duct component having a sealing gasket (32 and 72) having a closed cross section arranged around an external surface. The sealing gasket is fastened around the perimeter of the ventilation duct component. Ahlrot fails to disclose the method manufacturing the sealing gasket to include providing a continuous sealing strip, forming the sealing strip, cutting the sealing strip, or joining first and second ends of the sealing strip.
4. Suggs teaches a method of manufacturing a sealing gasket around a tubular element. The method includes providing a continuous sealing strip (10), forming the sealing strip into a shape that essentially corresponds to a perimeter of a tubular element, cutting the sealing strip (10) into a sealing strip portion (30) having a length corresponding to the perimeter of the tubular element, joining first (32) and second (34) ends of the sealing strip portion ("mating engagement", column 5, line 32) and fastening the sealing gasket around the perimeter of the tubular element. This is one of several known ways to arrange a seal around an element. Because it is a known method, and placing a seal around a tubular ventilation duct component is also known, it would have been

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obvious to one having ordinary skill in the art at the time of the invention to manufacture the sealing gasket of Ahlrot as taught by Suggs, as it is a well known method in the art.

5. With respect to claims 2 and 3, Suggs further teaches the method to including winding the sealing strip (10) around a forming mandrel (94) having a perimeter that essentially corresponds to a perimeter of the tubular element, and after joining the first and second ends (32, 34) of the sealing strip portion (30), transferring the sealing gasket onto the tubular element. Suggs also teaches the step of forming the sealing strip comprises holding a first end of the sealing strip against a point on the perimeter of the forming mandrel. The examiner asserts that this must occur in order for the sealing strip to be retained on the mandrel.

6. With respect to claims 4 and 5, Suggs teaches the step of forming the sealing strip around a forming mandrel comprises rotating the forming mandrel (94) around a center axis of the tubular element so as to arrange the sealing strip around the perimeter of the forming mandrel. Suggs also discloses arranging the first and second ends of the sealing strip portion adjacent each other and held against the forming mandrel. The examiner asserts that after the cut, the first and second ends are adjacent one another on the mandrel.

7. With respect to claims 9 and 10, Suggs teaches that providing sealing strip comprises providing a continuous sealing strip and the step of providing a sealing strip comprises feeding the sealing strip from a supply of such sealing strip (12).

8. With respect to claims 11 and 12, Suggs teaches the step of cutting the sealing strip comprises cutting it into a length that is essentially equal to the circumference of a portion of the tubular element. Suggs also teaches the step of joining together the first and second ends of the

strip portion comprises arranging them adjacent each other so as to provide a sealing gasket having a continuous profile (figure 3).

9. With respect to claim 13, Suggs teaches the step of joining together the first and second ends of the strip portion comprises arranging them in an overlapping manner. The examiner notes that because ends 32 and 34 of Suggs et al are cut diagonally, that they overlap.

10. With respect to claims 15, 18, and 20, Ahlrot discloses the step of fastening the sealing strip to the tubular ventilation duct component comprises clamping the sealing strip to the ventilation duct component (figure 9, clamped with strip 73 and weld 78). Additionally, Ahlrot discloses the sealing strip to be fastened to the tubular ventilation duct component by folding an edge portion of the tubular ventilation duct component (36a) so as to squeeze the sealing strip (32, figure 5) portion with a folded edge of the tubular ventilation duct component. Furthermore, the ventilation duct component is a thin walled sheet metal structure.

11. Claims 6-8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahlrot in view of Suggs as applied to claim 1 above, and further in view of Steenstrup (U.S. Patent No. 1,498,894). Ahlrot and Suggs discloses the applicant's invention substantially as claimed, but fail to show the step of forming the sealing strip to comprise winding the sealing strip around a perimeter of the tubular ventilation duct component.

12. Steenstrup teaches a method of manufacturing a tubular element having a sealing gasket comprising the steps of providing a continuous sealing strip (17), forming the sealing strip into a shape that essentially corresponds to a perimeter of the tubular element, cutting (page 2, lines 112-116) the sealing strip (17) into a sealing strip portion having a length that essentially

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corresponds to the perimeter of the tubular element, joining together a first and second end of the sealing strip portion (by way of tubular piece 12), and fastening the sealing gasket around the perimeter of the tubular element (in groove 16). The sealing strip is wound around a perimeter of the tubular element. This process is advantageous over the process taught by Suggs in that the step of transferring the sealing strip from the mandrel to the tubular element is eliminated.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of Ahlrot and Suggs, such that the sealing strip is wound directly around on the ventilation duct component, as taught by Steenstrup, in order to simplify manufacturing by eliminating the step of transferring from a mandrel to the tubular element.

13. With respect to claims 7 and 8, Steenstrup teaches forming the sealing strip comprises rotating the tubular element (12) around a center axis and the step of arranging the first and second ends of sealing strip adjacent each other.

14. With respect to claim 16, Steenstrup teaches the fastening step to comprise providing a circumferential groove (16) in the tubular element and arranging the sealing strip in the groove.

15. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahlrot in view of Suggs as applied to claim 1 above, and further in view of Knapp (U.S. Patent No. 6,550,775). Neither Ahlrot nor Suggs discloses the first and second ends of the sealing strip portion to be joined by one of a gluing operation, vulcanization operation, welding operation or heat treatment operation.

16. Knapp teaches a gasket with its ends joined together by gluing or vulcanization (column 5, lines 3-5) in order to securely form an annular gasket. Therefore, it would have been obvious

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to one of ordinary skill in the art at the time the invention was made to modify the combination of Ahlrot and Suggs, such that the first and second ends are joined by gluing or vulcanization, as taught by Knapp in order to securely form an annular gasket.

17. Claim 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Ahlrot in view of Suggs as applied to claim 1 above, and further in view of Heisler (U.S. Patent No. 4,398,726). Neither Ahlrot nor Suggs disclose the sealing strip to be fastened to the tubular member by adhering it to the tubular ventilation duct component.

18. Heisler teaches a tubular member (2) with an annular gasket (3) that is adhered (column 2, lines 4-5) to a tubular member. Heisler does this to secure the gasket in the necessary position on the outer portion of the tube with little no structural modification to the tubular element. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ahlrot and Suggs as taught by Heisler in order to secure the sealing strip in place without modifying the structure of the tubular element.

19. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahlrot in view of Barna et al ("Barna", U.S. Patent No. 5,551,706). Ahlrot discloses a tubular ventilation duct component having a sealing gasket (32 and 72) having a closed cross section arranged around an external surface. The sealing gasket is fastened around the perimeter of the ventilation duct component. Ahlrot fails to disclose the method manufacturing the sealing gasket to include providing a continuous sealing strip, forming the sealing strip, cutting the sealing strip, or joining first and second ends of the sealing strip.

20. Barna teaches a method of manufacturing a sealing gasket around a tubular element. The method includes providing a continuous sealing strip (16), forming the sealing strip into a shape that essentially corresponds to a perimeter of a tubular element (see figure 4), cutting the sealing strip (16) into a sealing strip portion ("cut to size", column 5, line 63) having a length corresponding to the perimeter of the tubular element, joining first and second ends of the sealing strip portion (at joint 18) and fastening the sealing gasket around the perimeter of the tubular element. This is one of several known ways to arrange a seal around an element. Because it is a known method, and placing a seal around a tubular ventilation duct component is also known, it would have been obvious to one having ordinary skill in the art at the time of the invention to manufacture the sealing gasket of Ahlrot as taught by Barna, as it is a well known method in the art.

21. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahlrot in view of Barna as applied to claim 1 above, and further in view of Suggs and Mercurio et al ("Mercurio", U.S. Patent No. 5,062,194). Neither Ahlrot nor Barna disclose joining the ends of the gasket on a forming mandrel and transferring the gasket to a tubular ventilation duct component.

22. Suggs teaches the method of winding a sealing strip (10) around a forming mandrel (94). Mercurio teaches a method of transferring a sealing strip (16) from a mandrel (38) to a tubular component. The sealing strip of Mercurio already has its ends fastened together. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of Ahlrot and Barna such that the sealing strip of Barna is wound around a forming mandrel, so that the sealing strip has a diameter corresponding to that of the tubular element, and

to transfer the sealing gasket from the mandrel to the tubular element, as taught by Mercurio, so that the process may be completely automated, which represent potential time and cost savings (column 1, lines 12-14). The combination would result in the sealing gasket (16) of Barna being wound around a forming mandrel (94) of Suggs, the ends being joined together (at joint 18) as disclosed by Barna, then the sealing gasket being transferred, as shown by Mercurio, from the mandrel to the tubular ventilation duct component of Ahlrot.

Response to Arguments

23. Applicant's arguments with respect to claims 1-18 and 20 have been considered but are moot in view of the new ground(s) of rejection. These claims are now rejected by the combination of at least Ahlrot in view Suggs, as discussed above. Examiner notes that Kemminer is no longer cited as an evidentiary reference with respect to claims 5 and 11, as Ahlrot and Suggs meet all of the limitations set forth in the claims.

24. New claim 44 is rejected by the combination of Ahlrot, Barna, Suggs, and Mercurio, as discussed in paragraphs 21 and 22 above.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following reference is cited to further show the state of the art with respect to manufacturing of sealing gaskets: Wendl et al.

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26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J Kyle whose telephone number is 703-305-3614. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

27. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on 703-308-1159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

28. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mk


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